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Established 1859 Pioneer of the Gas Industry

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NEW YORK, SATURDAY, DECEMBER 4, 1926.

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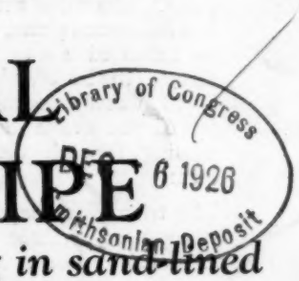

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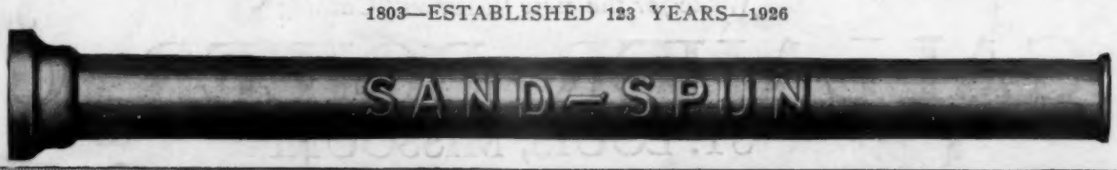

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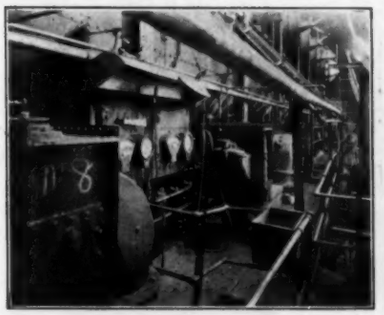
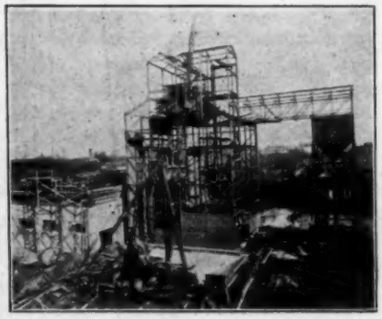
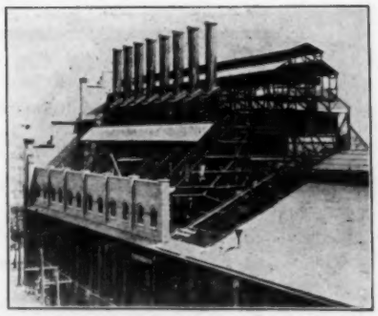


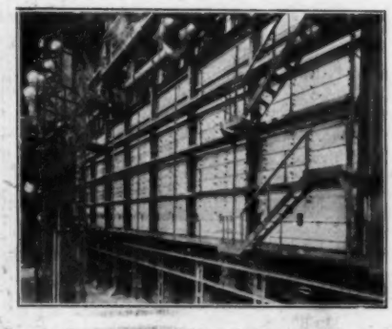
Collecting Mains Platform



New Plant Under Construction



Remodeling Horiz. Retort House



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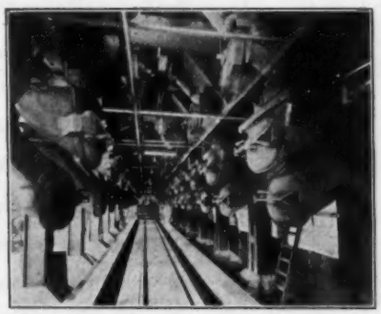
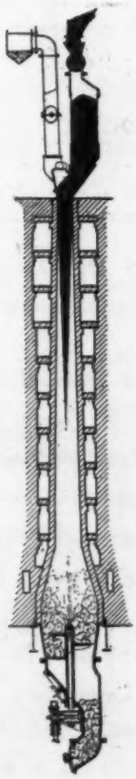


Coke Discharge Chambers



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AMERICAN
GAS JOURNAL

Established 1859— Pioneer of the Gas Industry

Vol. 125. No. 27. NEW YORK, DECEMBER 4, 1926. Whole No. 3609.

Home-Cooked Christmas Gifts

Many pertinent ideas exemplifying spirit of the season are given

Anna J. Peterson

Director of the Home Service Department, The Peo ples Gas Light and Coke Company, Chicago

THE purpose of a Home Service Department is to sell back to the woman of the world her own job, by creating in her the love and joy of cooking good, wholesome food for her family and friends. This is never done by sales, but rather by service. The slogan, "Ask Home Service anything you want to know" means that any woman may bring her problems to Home Service for kindly, thoughtful consideration, backed by technical training, which means efficient service.

Real service, sincerely rendered, brings results which are tangible and intangible. The very sincerity of the service, which is not hampered in any way by the thought of daily sales, arouses a response in the woman who feels the genuine interest demonstrated in home cooking. She sees exactly how a certain recipe is made. It explains away her difficulties. The result is she goes to her home and demonstrates unto herself her own job in a manner which gives her ease, comfort and joy. She realizes that she and her family are the living results of these recipes, properly prepared.

Service Must Be Broadly Planned

To arouse interest in cooking in every woman means that the service must be broadly planned. Information on all phases of housekeeping must be offered, for a woman not at all interested in cooking may delight in sewing, while another will be interested in better and quicker ways of cleaning. Of course, on the days they are sewing or cleaning they will be particularly glad to have a menu planned for them, which means the food will be cooking under the controlled heat of the oven, while they are busy with other work. Usually the thing which we dislike most to do is that about which we know the least. As the woman learns more about the ease and splendid results of cooking with accurate, modern recipes, she will find cooking easy and interesting.

That is why we stress Home Service as an informative service, knowing that if we offer efficient help, in all sincerity, we will build a new concept of housekeeping, which will gradually make every woman realize the importance of good home-cooked food around the family dinner table, and more than that, she will admit that it is a real joy to prepare it for an appreciative family.

Special Seasonal Appeal

In our service, it is my aim to keep two jumps ahead of every housekeeper in the needs of the season. Every month I offer her something different, in special service, together with the fundamental cooking demonstrations necessary for the three meals a day in every household. For instance, the month of December is a particularly busy one for homemakers with their plans for Christmas. It is the time when they are thinking of others, planning gifts and festivities.

We fit in with the festivities through our Friday afternoon demonstration class, which features party plans. Many attend this lesson, and more come in or 'phone for special help with planning the menu.

But largely through this month women are thinking of gifts. So I think of gifts, too.

Many women buy lustrous silks and fine linens to be made into dainty garments, or embroidered into ornaments. They put hours of time and squander precious eye-sight in placing tiny stitches. The dainty silk things may be spoiled in one washing if they are not carefully handled, and even the simplest silk garment is an expensive gift.

Few women are able to embroider beautifully. I know a woman who always ripped out the work

which was given her, saying she could do it better herself and the linen was worth it.

The Home Cooked Christmas Gift

Gifts of this sort invariably mean a return obligation. To me the sweetness, joy and real pleasure are entirely lifted from a gift when the word "exchange" is used. There is a sense of comparing values which mars the spirit of giving. Only love should prompt a gift.

That is why I stress for the month of December the splendid possibilities of home-cooked Christmas gifts. They express that loving thoughtfulness which comes with the making of a gift by hand. They are curiously lacking in the sense of creating an obligation. They may be sent to friends or acquaintances expressing just the degree of love or interest which is desired.

Colored Recipe Cards

Each month with the gas bill is enclosed a colored recipe card, which pictures the recipe given below. We have a water-color picture of the finished food made by one of the best commercial artists in Chicago. We send him our home-cooked art and he produces it, so that every woman may see exactly how the finished dish should look.

As the season for gifts approaches recipe cards are sent which will suggest appropriate Christmas gifts, such as a holiday cake, a basket of Christmas cookies, plum pudding or candied fruit peel. We have now issued so many colored recipe cards that we are able to index them in a card file. Attractively displayed for Christmas, this makes a most acceptable gift. The colored foods add much to the appeal of the file.

In the Gas Gazette which accompanies the bill and recipe card, Home Service has one page of advertising. For December we make alluring the possibilities of home cooking for Christmas, whether it be for gifts or for dinner parties.

Holiday Receipts for Baking

In the baking classes on Monday and Thursday, we make a special feature of holiday recipes, such as breads, cakes of all kinds, special pies and novel cookies. Early in the month the attendance is large, and the interest continues to the last week before Christmas. The last few days our work simmers down to consulting, and our 'phones reach a high pressure peak. I know from the inquiries that the women are at home doing just what we are striving for. They are in the midst of doing more cooking and better cooking than they ever did before.

We keep the department busy morning and afternoon with the making of spicy puddings and cakes which fill the air with their fragrance, so that any one coming within a hundred feet of the booth on the main floor or the experiment kitchen on the auditorium floor, will sniff and say, "I wonder what smells so good." Naturally, they will come to see. We have a recipe to give them, and we put over to them our enthusiasm in the making of Christmas gifts.

Advantageous Publicity

We count the time and cost of making a fruity cake of rich goodness as compared with the making of a luncheon set or a silk blouse, which too often becomes commonplace. The comparison is all in favor of the cake. We realize, too, that every cake which is given from one friend to another means the best kind of advertising, for the flavor and delight of it will be mentioned over and over again. And always they will say, "Yes, that cake was wonderful. I got the recipe from the Home Service Department of The Peoples Gas Light and Coke Company."

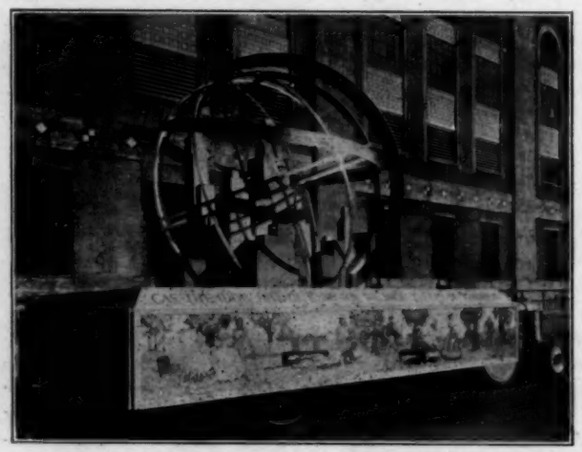
Last year we had the pleasure of having several mothers ask us if we knew where they could have the year's recipes bound substantially and inexpensively for their daughters who were to be married. They felt they were planning a good gift which was worth-while. We were delighted.

Window Display

Wrapping these home-cooked foods in an attractive manner adds much to the pleasure of giving them. We wrap our plum puddings in glace paper, tie them with Japanese flowered paper ribbon, and make them look most festive. Cookies packed in holiday boxes with paper lace doilies between layers will make anyone exclaim with delight.

In our window on Michigan Boulevard we have displayed these special Christmas gift foods, together with the recipes. The Home Service girl who cooks in the window has attracted such crowds of people that we have had the policeman request we remove her for a while, as she was stopping traffic. Do you know what she was doing at that particular time? She had a pastry tube in hand and was decorating a birthday cake for father.

Christmas cakes offer unlimited opportunities for decoration, and they will always attract attention. We have found that cake decorating is one of our best publicity demonstrations, and when displayed in the window will always draw a crowd.



The Float of the Consolidated Gas Co. of N. Y. In the Recent Broadway Celebration Parade

The Dehydration of Gas*

IV. Dehydration With Hygroscopic Substances

F. W. Speer, Jr.

THE use of various chemicals for the drying operations of the laboratory is familiar to everyone who has taken a course in elementary chemistry and, as might be expected, a great deal of work has been done in endeavoring to utilize on a large scale the principle of drying by reagents. Of the several hygroscopic substances that are commonly employed for laboratory purposes, the caustic alkalis—sodium hydroxide, potassium hydroxide, calcium oxide, etc.—are ruled out of application to the dehydration of manufactured gas on account of their action on carbon dioxide. There remain several substances such as phosphorus pentoxide, calcium chloride, calcium bromide, and sulphuric acid, that might theoretically be employed. Several of these, however, are too expensive for consideration and after these are eliminated there remain only two feasible materials—calcium chloride and sulphuric acid.*

Any system of drying gas by means of these chemical desiccators would have the general advantage of dispensing with any great amount of compression or artificial cooling, so that loss of heating value through removal of light oils would be reduced to a minimum. The utmost precautions would have to be taken to prevent entrainment of the desiccating substance. The absorption of water by reagents, such as calcium chloride or sulphuric acid, is an exothermic process liberating relatively large amounts of heat, and special cooling means must be provided to prevent the temperature of the system from rising to such a point that dehydration is no longer effective. Means must also be provided to reconcentrate the diluted chemical or else to dispose of it in some way that will not involve too great expense for new material.

Dehydration By Calcium Chloride

Calcium chloride is produced in great quantities as a by-product of the manufacture of sodium carbonate. It is also produced in other industries. The supply is considerably greater than the normal demand.

Most processes proposed for the employment of calcium chloride have used this material in solid form. The Fryer process made its appearance as early as 1880 and involved passing air over broken pieces of anhydrous calcium chloride, collecting the solution, evaporating this and fusing the residue which was returned to the drying chamber. This was followed by the Cremer process in 1885, which provided for the regeneration of the moistened calcium chloride in situ. The Elsner process of 1906 also employed solid calcium chloride. The Harbord processes of 1907 and later employed porous bodies such as pumice stone, or preferably very porous common brick impregnated with a concentrated solution of calcium chloride, and had provision for regeneration in situ. All of these processes are described in an interesting article by Daubine and Roy,[19] which presents a very clear statement of the principles involved in dehydration by calcium chloride. These authors developed a process of their own which is based principally on the employment of the monohydrate of calcium chloride ($CaCl_2 . H_2O$). There are several hydrates of calcium chloride existing in solid form at ordinary temperature. They give preference to the monohydrate because regeneration to the anhydrous substance requires a disproportionate amount of heat. Their process was applied in drying air for a blast furnace of the Differdange Steel Works in Luxemburg. It is stated that in the operation of this plant the air at approximately 60 degrees F. was reduced to a dew point as low as 5 degrees F.

Disadvantages of Method

Although the dehydration of gas by means of solid calcium chloride offers possibilities worthy of investigation and possible development, it suffers the general disadvantages that always attend the large scale treatment of a gas with a solid reagent. If regeneration is conducted in situ, special precautions have to be taken to prevent liquefaction of the

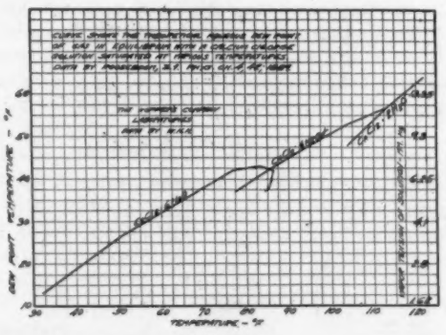


Fig. 14

calcium chloride because many of the solid hydrates melt readily at moderate temperatures. Where it is necessary to obtain extremely high efficiencies in the removal of moisture, a saturated solution of calcium chloride may be more convenient in practical application. Figure 14 shows a vapor pressure curve for solutions of calcium chloride saturated at various

* Fourth installment of Mr. Sperr's article.

* Calcined gypsum has also been proposed as an agent for the drying of air.[17]

[16] W. H. Carrier, Centrifugal Compression as Applied to Refrigeration, Refrigerating Engineering, Feb., 1926.

[17] Ferd. Lossen, Ger. Patent No. 236,549, 1910.

[18] Journal of Gas Lighting, May 20, 1913, p. 527.

[19] F. A. Daubine and E. V. Roy, Desiccation of Air by Calcium Chloride, Chem. and Met. Eng., July, 1911, p. 343.

temperatures, and also shows the dew point of gas in equilibrium with the saturated solution at each temperature. The broken character of the curve is due to the varying condition of hydration of the calcium chloride at different temperatures.

The figures are for theoretically perfect equilibrium and the actual dew point of gas treated with a calcium chloride solution in large scale operation would depend upon the efficiency of the scrubber. In one series of experiments under conditions equivalent to a theoretical dew point of 42 degrees F., the actual dew point was found to be 48 degrees F.

It will be noted that a saturated solution of 60

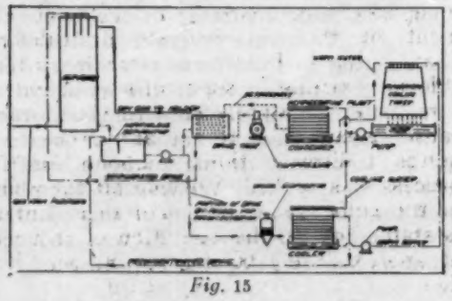


Fig. 15

degrees F. is theoretically nearly capable of reducing gas to a dew point of 30 degrees F. With a comparatively small amount of artificial cooling it should be possible to accomplish satisfactory dehydration of gas with a calcium chloride solution, even under unfavorable conditions of temperature. A two-stage system has been proposed for the drying of blast furnace air, using refrigerated water at 34 degrees F. in the first stage and refrigerated solution of calcium chloride in the second.[20] Figure 15 shows a flow sheet for a single-stage system for manufactured gas employing a refrigerating plant with means for reconcentrating the solution.

Using $CaCl_2$ Solution

A calcium chloride solution might also be employed for scrubbing compressed gas in such a way as to keep the dew point of the gas entering the distribu-

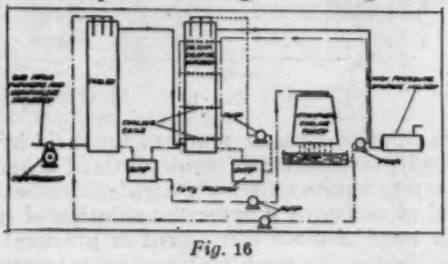


Fig. 16

tion system below 30 degrees F. This system, illustrated in Figure 16, is a very simple one eliminating any necessity for a refrigerating plant.

The compression and actual power required for delivering gas under atmospheric pressure with a dew point of 30 degrees F. are as follows: (assuming the actual dew point of the gas after treatment with the calcium chloride solution to be 6 degrees F. higher than the theoretical).

Temperature of gas before and after compression	Equilibrium Dew Point of $CaCl_2$ Solution	Pressure gauge, lbs. per sq. in.	Power Required Hp. per M.C.F./Hr. for Compression	for Circulation	Total
60°F.	38°F.	6	0.51	0.03	0.54
70	44	11	0.80	0.03	0.83
80	48	16	1.07	0.03	1.10

In any such system the utmost precaution would have to be taken to prevent entrainment of calcium chloride solution. Coils containing cooling water would have to be placed in the scrubbing apparatus and means would have to be provided for reconcentration of the effluent solution and for cooling after reconcentration. The system thus loses its apparent simplicity, but on account of its probably low operating cost is worthy of consideration.

Dehydration By Sulphuric Acid

Concentrated sulphuric acid is a very effective desiccating agent and has the advantage of being capable of application in liquid form. The dew point of air in equilibrium with 85 per cent sulphuric acid

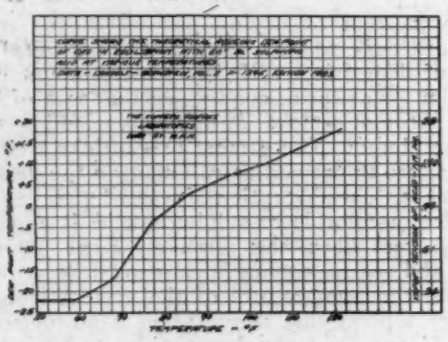


Fig. 17

at 86 degrees F. is —26 degrees F. A very satisfactory degree of dehydration may be accomplished even with ordinary 60 degree Baume sulphuric acid. Figure 17 shows the dew point of gas in equilibrium with 60 degree Baume sulphuric acid at various temperatures.

In the employment of sulphuric acid it is essential to use such an amount that the strength of the diluted acid is always greater than the equivalent of 50 degrees Baume. At lower concentrations the acid attacks iron and steel, and expensive acid-proof apparatus must be employed. The absorption of moisture liberates a large amount of heat. This heat is sufficient to raise the temperature of the system as much as 63 degrees F. without allowance for radiation loss. This assumes the use of 60 degree acid with gas saturated at 79 degrees F. The outlet gas from such a system would theoretically have a temperature of 142 degrees F. Such an increase of temperature would increase the vapor tension of the sulphuric acid to a point where efficient dehydration

[20] Bruce Walter, Drying Air for Blast Furnaces, Chem. and Met. Eng., Aug., 1912, p. 471.

of the gas would no longer be possible. With 60 degree acid, therefore, cooling must be employed in one form or another. Figure 18 shows a system in which the gas is treated in two stages. In the first stage a continuous recirculation of acid is maintained, the acid emerging from the scrubber being pumped through water cooled coils and thence back to the scrubber. In this way the difficulties and complications that would attend having the cooling coils inside of the gas scrubber are avoided. From this first stage the gas passes through a contact apparatus to which fresh acid is supplied to complete the removal of moisture. Either concentrated acid or 60 degree

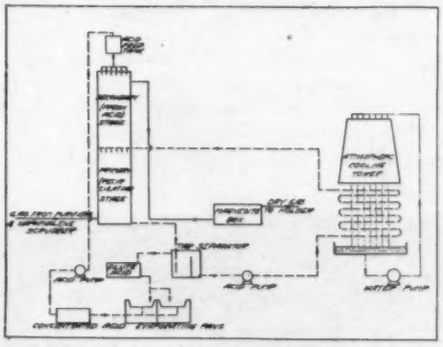


Fig. 18

acid may be used, but no cooling is required in this second stage. The acid from the second stage passes directly to the first stage to mingle with the recirculated acid and the addition of fresh acid and the withdrawal of diluted acid are balanced so that the strength of the acid in the first stage is maintained substantially over 50 degrees Baume.

If concentrated acid (66 degrees Baume) is employed, cooling is theoretically unnecessary but should probably be performed, as the heating of the gas to such high temperatures would be undesirable from a distribution standpoint. It has been found experimentally that the sulphuric acid reacts with certain of the unsaturated hydrocarbons in the gas forming small amounts of tarry matter which have to be removed from the system from time to time. The heating value of the gas is not appreciably affected and the removal of such hydrocarbons would probably be an advantage because it is probable that they consist chiefly of the so-called gum-forming substances.

The Disadvantage of Reconcentration of the Acid

The principal objection to the use of sulphuric acid for the dehydration of gas is the inconvenience and expense of reconcentrating the diluted acid. In the system proposed by C. J. Ramsburg of The Koppers Company** this difficulty is completely eliminated. In this system (Figure 19) the acid from the dehydrating apparatus is employed for the manufacture of ammonium sulphate in the regular by-product recovery operations. This can be done using acid of 50 degrees Baume without any inconvenience in the operation of the sulphate plant, and under normal conditions the amount of sulphuric acid required for

** Patent pending.

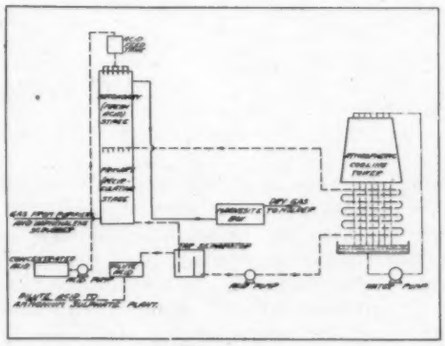


Fig. 19

dehydration of surplus gas from a by-product coke plant just balances the requirements of the sulphate plant operating in connection with the production of the gas.

The possible entrainment of sulphuric acid must, of course, be strictly guarded against. It is proposed to place a catch box, filled with magnesite (magnesium carbonate) or some other neutralizing agent, in the line directly after the last stage of the dehydrating apparatus and experiment has proven this to be absolutely effective in removing every trace of acid.

¤ ¤ ¤ ¤

A NOVEL CUSTOMER NOTICE

The Norwood Gas Co., of Norwood, Mass., sent out recently a notice to their customers, calling attention to the fact that rates had been reduced This company ingeniously took advantage of this circumstance by issuing a four-page folder containing not only reproduction notice but also advertising ranges, water heaters, garage heaters and space heaters.

The back of the folder contained an advertisement on house-heating. This is a splendid idea because there is no time like that when a rate is reduced, for encouraging the use of gas for the many purposes to which it is now being put in the home, and particularly for house heating.

¤ ¤ ¤ ¤

An Example of a Realistic Window Display

A Successful Range Campaign

A southern gas company attains its goal through 100 per cent co-operation

William E. Leverette

Manager, Lighting Division, Alabama Power Co., Birmingham, Ala.

IT has often been said that the only satisfactory way in which to run a campaign, whether it is concerned with the sale of merchandise such as gas appliances, gas service or with gas company's securities, is to enlist the co-operation of all employees. In other words, this is merely an exemplification in a certain sense of the old fable told by Aesop, in which the three sons were taught a lesson in co-operation by their wise father, who showed them that it was easy to break one stick but very difficult to break a bundle of sticks.

What it is intended to point out in this symbolism is that, when everyone who is connected with the gas company enters into the campaign that may be conducted by that enterprise, results are forthcoming that satisfy all.

A very interesting example of the truth of this contention was recently furnished in the campaign that the Alabama Power Company of Birmingham, Ala., conducted to sell gas ranges and obtain new customers. It was the most successful campaign of its kind ever conducted in the South, and in fact equally as good or better than any that was ever undertaken by any gas company under normal conditions. Normal conditions are specified particularly, because no extensions to speak of were granted. In other words, the ranges were actually sold and not given away.

The Territory Served

To understand the manner in which this campaign was conducted and brought to such a successful conclusion, it is necessary to know something about the territory that is served by this company. There are five small gas towns in this territory scattered over the state of Alabama.

First, there is the town of Montgomery with 3,000 meters. The gas rate there is $2.00 service charge and $1.00 per thousand cubic feet of gas consumed; secondly, the town of Anniston with 1,500 meters where the gas rate is $1.50 per thousand cubic feet; thirdly, there is Selma with 1,000 meters, the gas rate being $1.20 per thousand cubic feet and $1.75 service charge; fourthly, Albany with 700 meters and a rate of $1.90 per thousand cubic feet; and, finally, Tuscaloosa with 1,000 meters and a rate of $1.00 per thousand cubic feet. All of these towns have manufactured gas except Tuscaloosa, which uses by-product gas, piped five miles.

Campaigns Started Year and Half Ago

The Alabama Power Co. began having campaigns about a year and a half ago. There was one in the spring and one in the fall and these campaigns increased the number of meters by about 450 within a period of eighteen months. These campaigns were considered highly successful and a total number of ranges equal to five per cent of the customers was sold and new customers equal to two and a half per cent of the meters were secured.

The fall campaign was held in 1925, both in Montgomery and Selma. During that campaign 245 ranges were sold and 125 new customers were secured. This sale was considered a remarkable success, and it was the general opinion that it was the most successful campaign ever held in the south. The range sales amounted to about seven per cent of the total number of customers on the books and the number of meters were increased by about four per cent. Reports showed that in cities with about 7,000 to 12,000 meters, about 250 ranges could be sold and in cities of 15,000 to 30,000 meters about 500 ranges. This does not refer to new customers, for new customers were considered as a secondary matter. Hence, the Montomery and Selma records, referred to above and compared with this average, were excellent.

The Sale Closed With a Night Demonstration

Planning the New Campaign

Recently the company wanted a real successful sale of gas ranges and a large increase of new customers. It should be mentioned here that the conditions under which the Albany Power Company operates are those of a small gas property, and hence the methods of campaigning and selling gas and gas appliances are those which are commonly met with

in this kind of a gas company. The first step taken in planning the new campaign was to make inquiries of the men in the field, making checks and finally setting quotas. These were range sales equalling five per cent on the number of meters and new customers equalling two and a half per cent on those already on the books. These figures, of course, were obtained after giving due consideration to past performances, financial conditions and the like. The final quota was 360 ranges and 183 new customers.

The first reaction on the part of those concerned with this campaign was that these figures were pretty high and that it was going to be a hard job to accomplish this task. It would actually have been so, had not the commercial department had the co-operation and support of the executives of the company and of all the members of the organization. Another circumstance may be mentioned and that is, that Alabama is one of the lowest states in the Union in income per capita. Alabama depends largely upon cotton and the condition of the cotton market has been very poor this year. Furthermore, coal is fairly cheap throughout the state and particularly in the towns served by this company, for Birmingham, the industrial center of the state, is fairly close to them. Competition with coal is rather an important factor. This is illustrated by the fact that although Selma has 20,000 people there are only 1,000 meters in that town. Kerosene and stove-wood are also used as they are somewhat cheaper than gas. However, although all these counteracting features were known, nevertheless it did not act as a deterrent to the gas men who were determined to increase the sales of gas and of gas appliances.

Personal Visit By the Manager of the Campaign

The next step in the campaign was a personal visit paid by the manager of this enterprise, W. E. Leverette. Mr. Leverette visited each town and explained the campaign in detail. He showed each employee that it was to his advantage to sell ranges and secure new customers, and explained that this was a sort of game, in which there would be plenty of prizes for the winning team. Prior to Mr. Leverette's visit a carefully prepared set-up was sent to employees in all the five towns. This included the complete description of the campaign, its purpose, the make-up of various selling teams and all the details regarding the advertising and the arrangement of window displays and the like. In fact, every detail was taken care of, so that all that the teams had to do was to sell ranges and get new customers. Just one type of range was sold, the Magic Baker, which is made by the Birmingham Stove & Range Co., Birmingham, Ala.

Weekly Bulletins Issued

After the campaign started, weekly bulletins were issued showing the progress made in sales in the various towns and in the amount of accumulated prize money. This created a real fighting spirit and had a very potent effect in accelerating the efforts of the salesmen. At the end of the campaign, which was continued right into the night of the last day, the company had sold 1,031 ranges and it also had had considerable success in getting people to reconnect ranges that they possessed but which they had discontinued to use in the past because they had found that the gas price was too high. A further condition which made this campaign such a difficult one was the fact that some of the gas properties had been acquired about five years ago, when they were in a poor running condition, which meant that they had to be rebuilt, and customers had to be resold on gas. Nevertheless, the company was successful in obtaining 1,084 new customers.

The Results

The range sales were fourteen per cent of the meters and the new customers fifteen per cent. These are believed to be very good records. Just to form some comparisons, it may be stated that any town with 35,000 meters would have to sell 4,000 ranges and secure 4,500 customers to compare with 1,000 ranges and customers obtained by the Alabama Power Company with only 7,200 meters.

It was mentioned above that this campaign was

(Continued on page 666)

One of the Ads Used In The Campaign

Gas Househeating at Rochester*

Some interesting details on how househeating business is conducted there

Arthur A. Reeves
Engineer, Rochester Gas & Elec. Corp., Rochester, N. Y.

THE question of the house heating load affecting the general sendout curve is neglected at this time, as after all, this feature does not enter into the merchandising methods, and the merchandising method employed by the gas company is largely responsible for the success or failure of its efforts to obtain this business.

The gas company should select at least one man—preferably more—but one to start with is sufficient. This man should not have any other work to do but to specialize on his one job—that of house heating. As his department grows he will need assistants, and the above condition applies to them also. Whether he should be an engineer or a salesman is a matter of judgment for his superiors. Rochester experience has shown that he must be either a salesman with an engineering mind or an engineer with selling ability. Otherwise, his "daily dozen" is not liable to be a bed of thornless roses, if that condition exists anyway for the house heating man.

Establishing a Sales Policy

The company should establish a selling policy in which the sale of gas is exalted at the expense of equipment sales. It is not meant by this that equipment should not be sold, for equipment should be sold —and at a profit—wherever possible, but the interest of the heating contractors in the district served should be considered. If you have the contractors co-operating with you, respecting their rightful business, maintaining list prices of equipment on your own sales, etc., you have overcome a great sales resistance. If the contractors are lined up against you, you must maintain the labor and equipment of a steam fitting and a sheet metal firm which is an expense hardly justified. Furthermore, the contractor will compete with you with coal and oil equipment of which competition there is enough now without forcing more active competition.

Rochester has co-operated with the contractors to the extent of supplying neatly lettered signs stating that the house on which it is placed is to be heated with gas equipment installed by the so-and-so heating contractor followed by the gas company's name in small letters, so that the reader may use his imagination as to why it is there. Rochester's men will supply information, make surveys, specify apparatus, and supervise work, for any embryo gas user or any heating contractor, gratis, asking only that its standards of installation be maintained and that the owner look to the gas company for service in so far as combustion and gas controls in general are concerned. The gas company also supplies the owner an estimate of his annual gas cost. This is very important for nothing strains the "public relation" of a gas company as a consumer with a gas consumption larger than he thinks it should be.

Complete Installation By Gas Company

Rochester has found that nine out of ten of its prospects wish the gas company to do their installation complete. Inasmuch as the company is not fully equipped a large amount of installation work is given outright to the heating contractor, by competitive bid or by owners expressed preference, when this fact is explained to him. The result is that the most amicable relations exist between all concerned.

A preliminary survey is made of the house to be heated. From the cubical content, exposed wall area, glass and opening area, and ceiling, the B. T. U. loss per degree-hour is determined. From this figure an annual gas consumption is made as well as the amount of radiation or the amount of gas necessory to burn per hour in zero weather to maintain a temperature of 70 degrees F. In supplying a preliminary gas estimate to the owner, two things are accomplished. First, the owner is prepared for what he may expect as to cost of operation; second, the gas company, by intentionally over-estimating, secures the everlasting good-will of the customer, after a year's trial shows that the truth—or more than it—has been told.

In new houses, insulation has a great effect on gas consumption, often reducing the gas consumption 25 per cent to 50 per cent over an uninsulated house. Any of the standard insulating material has its own value per thickness and allowances are made for it in the preliminary estimates.

Installation Is Controlled

Heating systems for new houses are easily checked up from the plans and usually no difficulty is encountered in changing them if they do not come up to best practice. In houses already built and occupied, the practice of disclaiming responsibility for the installed radiation is followed, but if any apparent shortage is noted, the owner is frankly told about it. If not corrected, the usual guarantee "to maintain the house at 70 degrees F. in zero weather" is amended to fit the condition. Where warm air is employed as a heating agent, no installation will be made until the piping, cold air returns, etc., are brought up to an inflexible standard. In this way we are able to control the installation from start to finish, recommending but one type of furnace and following closely every one sold in our own district.

The capacity of boiler and furnaces is carefully determined and only the nearest size to the actual demand of house is recommended. No attention is paid to installed radiation or past performances expressed in tons of coal, other than to compare with final figures based on house demand.

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*Delivered at the Gas Section Meeting, Empire State Gas & Electric Association.

Gas Controls

In selecting gas controls, there are many different types on the market that all are good. At Rochester, we are using the combination of those that are simplest, mechanically safest, and at the same time as easy as possible on the owner's pocketbook. Warm air furnaces are controlled with the valve directly in the supply line. Boilers are controlled with the valve by-passed around a diaphragm, which is also actuated by the water temperature or steam pressure through an arm and lever regulator. In vapor boilers, the rule has been put into effect that a gas meter will not be allowed to be set where the boiler does not have a low water fuel cut-off attached and in operation.

In the preliminary stages the owner wants to know what the installation cost will be. The salesman is able to make a close guess, and the order taken on a time and material basis to approximate this figure. If then desired, contractors may supply bids and the order changed to the exact figure. With a little experience and a bit of judgment, the salesman can handle his prospect in the manner best to fit the condition regardless of what it may be.

The Chimney

Now for the most disagreeable part of house heating—the chimney. First of all, disclaim all responsibility for the chimney and tell the owner why. Rochester does that, and also recommends how to build a new chimney using tile linings, etc., and then disclaims responsibility even for that. This may seem a strange proceeding, but the owner invariably, with an eye to the future when he may have to use coal again, builds his chimney of the size necessary for coal. Bell tile is recommended but it is more costly than the usual square tile. If square tile is used, an air space of at least ¼-inch should be between the tile and brick of the chimney, tacking the tile with brick in a few places to hold it rigid. With existing chimneys, Rochester has found that nine out of ten are usually found satisfactory for operation, being self-draining or tight enough for the purpose. But, that tenth chimney makes enough trouble to make up for the other nine. There are only two remedies. First, point the interior and trust to luck in reaching every crack, and second, build a new chimney. If the chimney is lined with tile, assume it good enough to let alone, and hope that it won't bother. If unlined, go through the procedure mentioned above.

Two Examples

Two typical examples are as follows: Condensate came through a crack or fault in the brick work of on unlined chimney into a second floor bedroom. Wall paper and plaster soaked off. The action of sulphuric acid on the ink used in printing the wall paper released cyanogen gas. Also, condensate came through the outdoor side of the chimney, staining outside. Painting the interior, has to date, cured the trouble. In the second case a house chimney flue ended at top of the cellar wall, allowing any condensate in interior of chimney to collect at the bottom of flue. Inasmuch as this flue was excessively large, the remedy was to place a copper box at the bottom of chimney so that it collected all condensate and at same time could be removed when worn out. This box connected direct to the drain pipe. Also all flue-piping is made up of 16 ounce copper tightly soldered and taped with friction tape at every joint, and is covered with two layers of air cell asbestos, in an endeavor to stop radiation from flue gases through copper and raise temperature of flue.

First Steps in Selling House Heating

To actually sell gas house heating, the prospect must be found who is interested in better heat, convenience, and automatic operation. To his first question, which invariably is, "What is the comparative cost as against coal or oil?", the answer is, in Rochester, "Double either coal or oil to obtain the gas cost." But don't forget that coal and gas must be first vaporized to burn, while gas is prepared and ready to burn. The labor of handling coal is worth something, and the cost of mechanical apparatus operation to vaporize oil is an item. If the prospect is patriotic, a reference to conservation of coal and smoke abatement, which is a familiar topic to gas

The stockings were hung ON THE BEDPOST with care
So no one would freeze to death finding them there!
—With apologies.
MOTHER'S little red knitted stocking was never hung by the parlor chimney! It was tied securely to the walnut "four-poster". The family hearth in her day was a great nickel trimmed base burner, and until somebody got up and shook down the fire, it was too cold for youngsters to fly through the frosty rooms in nothing but their "sleepers". So Santy obligingly left his load where it might be examined from under the quilts.
"If it's done with Heat—you can do it Better with GAS"
In today's gas-heated house, all the rooms, upstairs and down, are evenly warm at the first light of dawn and in the modern "fireplace" a radiant heater gives a quick, clean, glowing gas fire. It's a cheerier Christmas, an easier Christmas and a more comfortable Christmas for every member of the family
(Your Name and Address Here)

A Timely Ad In the Christmas Spirit

men, should be used. To sum up, gas represents an overall cost to the consumer, whereas coal and oil are first cost of raw fuel. Therefore, overall cost per year is the real figure, and the writer is not at all convinced that coal operation with paid labor, or oil operation, with its attendant operating expense, depreciation, repairs, etc., is after all so much more economical than gas. In fact, experience has shown that the prospect will look at it in this way, and makes his choice from preference. Of course, this may not be true everywhere, but in the case of Rochester a basis of $15.00 per ton coal, 10 cents per gallon oil, and $1.00 per thousand gas, is assumed.

The First Cost of Equipment

The second point the prospect wants to know is what the first cost of equipment amounts to. New homes can be equipped with gas apparatus, at about the same cost as an equivalent coal installation. Where oil is under consideration the burner represents almost an entire additional cost. Insulation for a new home will reduce first cost of gas equipment, also radiation, in addition to reducing operating expense. In remodeling a house, gas equipment is a total new cost, and about the same cost as conversion of coal equipment to burn gas. Conversion is not being done under any circumstances at Rochester. The cost of gas apparatus also is about equal to the cost of a good oil burner.

Rochester has an arrangement whereby it finances first cost installation for the consumer on about the same basis as the automobile finance plan 1/3 payment with order and balance distributed over 6 to 12 months.

Installing equipment calls for ingenuity and initiative, for almost every installation has its peculiarities and difficulties. Boilers are simpler to put in than air furnaces, as they may be located in a multiplicity of places. In old houses, difficulties may be encountered that must be overcome as seems best. Some owners want the gas boiler parallel to a coal boiler, so they can use either or both, or for booster purposes, etc.

Furnace Location Important

Furnace location is so important, that often the success or failure of an installation depends on it. As near as possible to the center of distributing stacks is the best location. Where long pipe runs are encountered, two furnaces or even three should be utilized and placed as near to the center of their distribution stacks as possible. Heat pipe sizes should vary according to the size of the space to be heated. 8 inches to 14 inches are the extremes used. Inside air returns of equal or greater free area than all the heat pipes must be installed, and again ingenuity must be exercised. The owner may object to cutting into fine floors, etc., but stair risers, base boards, window seats, etc., can be utilized. The direction of joists is an aid, as they may be covered on the bottom and eliminate the use of large size pipe and its cost. Drains are necessary to remove condensate and humidifier overflow. These are buried in the floor, but with fittings exposed in order that they may be periodically opened and flushed out.

Thermostats are used to control room temperature. The eight day clock type with automatic shutdown during the night hours should be used. Controversy as to whether the night shutdown really saves gas consumption was definitely settled by a series of tests which were recently run. Second floor windows were opened as usual during the night and no effort was made to save heat by closing doors, the result showing that the shutdown was the more economical.

Every gas company now maintains an emergency service department, and these men can easily be trained to understand the working of gas controls to be able to make emergency repairs and adjustments. One man, at least should have a thorough understanding of all working parts of both boilers and furnaces. The policy should be to make periodical inspection, minor adjustments and repairs free to the consumer but major repairs should be charged to the consumer, if there is no negligence on the part of the gas company. As an instance of this latter case, a steam boiler recently exploded due to lack of water. Inasmuch as the gas company had not insisted on the installation of a low water fuel cutoff, it was assumed to be negligence and the boiler replaced at no expense to the consumer.

Experience has shown that 1 per cent of the total heating load in Rochester does not affect the sendout curve and it is believed that 10 per cent will be the saturation point due first to naturally inclined gas users, second, that coke sales must be taken care of and third, there is a certain amount of coal used that will always be used regardless of gas.

Therefore, for some time at least there will be no danger of getting into manufacturing and send-out trouble, and until the time comes when this will be a factor, the use of gas in summer to balance the load should be pushed to the limit.

FIRST GAS ENGINEERING DEGREE AWARDED IN U. S. GIVEN BY JOHNS HOPKINS

One hundred and ten years after the first gas plant was built in the United States, the first academic degree in gas engineering was awarded in the same city in which the industry had its beginning, says the New Jersey Public Utility Information Committee.

Johns Hopkins University, Baltimore, in June of this year awarded the degree of bachelor of engineering in gas enginering to Donald T. Bonney, Pittsburgh, a member of the class of 1926. The professor af gas engineering at Johns Hopkins stated that so far as he knew Mr. Bonney is the only person that has ever received this honor.

The first gas lighting plant in this country was established in Baltimore in 1816, four years after the first use of gas for illumination in England. The second gas plant was established in New York City in 1823.

Stabilization of Market Progresses

Retailers expect good Christmas business

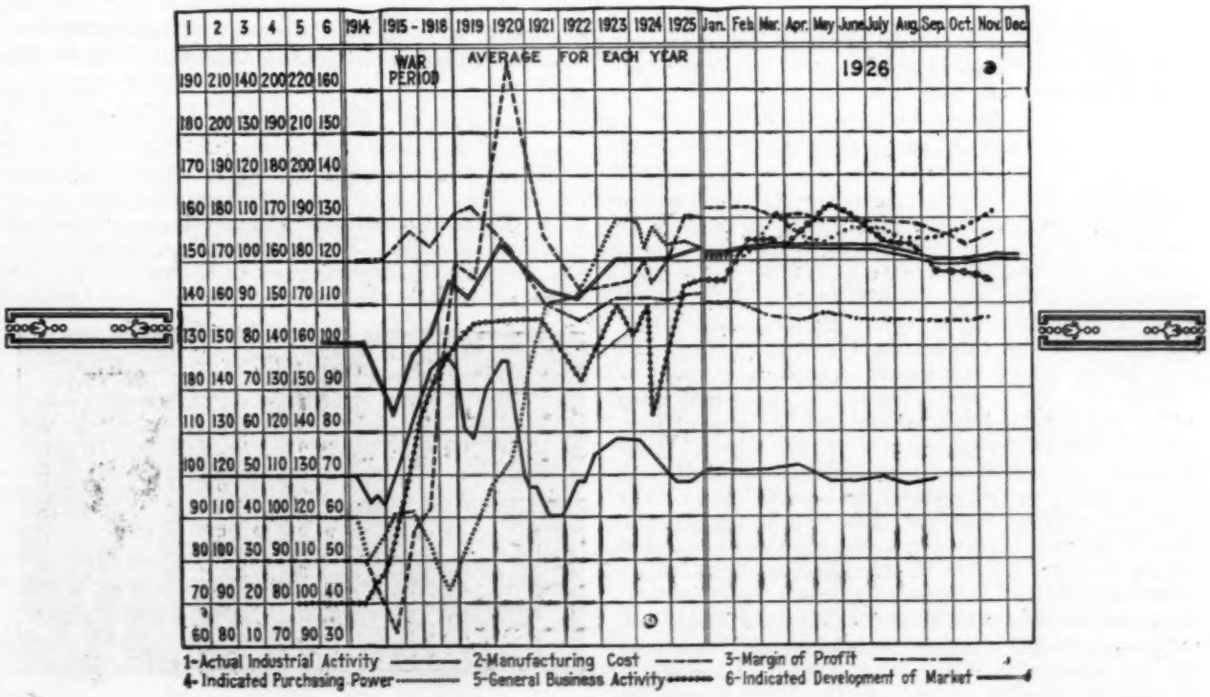
Walter Alwyn-Schmidt

WITH the elections as an influence upon the market removed, business has progressed through a rather uneventful November to a December holding no promise for a definite change in either direction. Early winter business has moved upon very much the same lines as the business during the rest of the year. There have been few startling changes and the generally high level of the business curve has been maintained for almost nine months without any perceptible deviation. Such a condition would have been thought almost impossible in the pre-war past. It has, however, prevailed for shorter periods during the last few years, and it appears to have become a definite characteristic of the economic life of the American market.

Several market and financial experts have noted already this condition and have tried to explain it in various ways. The most likely explanation amongst those put forward is that the various means of market stabilization introduced into American business life by economic legislation and free cooperation have finally led to a better equalization of all factors influencing the volume and trend of business. It should be added that we possess now a better knowledge of the underlying market facts and a more comprehensive supply of reliable statistics which both enable business men to take a wider view of the market and consequently fits them better to deal with any likely emergency because this emergency is known earlier.

Whole Field Affected

This stabilization of the market affects practically the whole field of market activities. This is not only noticed in the actions of the ordinary measuring units, which are used today for measuring market strength, but it also appears just as pronouncedly in the case of such less easily-defined factors, such as purchasing strength, manufacturing profits and manufacturng cost which form so important a part of the successful system of forcasting used for plotting the principal forecasting line of our chart.



Business, no doubt, will be better for this change and, assumed that continued intelligent handling of the affairs of the nation's markets takes place, should be less subject to violent economic reactions than has been the case in the past. Whether this means a shortening of the economic cycle, as some economists think, or a lengthening, as it is the personal view of the writer, does not matter very much in the face of the main fact, that business moves on a general upward curve with comparatively few downward modifications.

There is every indication that the country has finally overcome the unpleasant effects of the

(Continued on page 662)

Industrial Gas and the Radio

Many parts, including tubes, made with aid of gas

Boris S. Naimark

SEARCH for truth and progress have been the outstanding features of the last quarter of a century of our civilization. Of the wonderful discoveries that this search for truth has brought about, radio has experienced the most rapid advances and has firmly established itself as one of our leading industries.

It is significant indeed that industrial gas as a fuel has played a most important part in the development of the radio industry to the status it has attained to date.

Industrial gas, as it is used today in the radio industry, not only facilitates quantity production, but also accounts for many marvelous improvements in this art and science.

The following is a review of the most important applications that gas, as a fuel, finds in the production of modern radio apparatus.

The Cabinet or Console

The first thing that attracts our attention as we look at the modern radio receiver is its housing in the form of a cabinet or console. Now, the probability is, that the wood of this cabinet or console was dried in a kiln, the steam for which was supplied by a gas-fired boiler. The glue that was used to put the pieces of the cabinet together was also, in all probability, heated in a gas-fired cooker.

Next to attract our attention is the panel upon which are mounted the tuning and adjustment controls as well as the indicators. If this panel is made of metal and has a beautiful crystalline finish this was probably baked on in a gas-heated oven. The panel is however more probably made of bakelite. This is a trade name for a patented resinous substance invented by Dr. L. H. Baekeland, which requires the application of comparatively high temperatures and pressures in order to make the solid, permanent, strong, infusible, insoluble, and non-conductive material that we have learned to recognize as bakelite. Gas is very frequently used to supply the necessary temperatures in bakelite moulding. By automatic regulation of the gas supply uniform temperatures are easily maintained, thus facilitating production and reducing the cost of the finished product. It is likely that gas is responsible for a very large percentage of the bakelite used in radio panels and all other bakelite radio parts.

Whether the dials are made of hard rubber, bakelite, or stamped metal with enamel coatihg gas was used to facilitate their production.

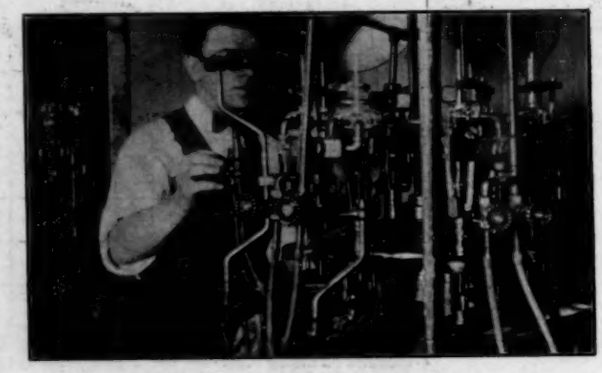
The Receiver Itself

Let us now look into the receiver. Our attention is first attracted by the tuning condensers. These are usually assembled by expert operators. In order to facilitate production this assembly is made in accordance with a regular system. While the operator is assembling plates in one jig, another is being heated with a gas Bunsen burner, while a third is cooling on the bench. If the condensers in your receiver are of the die cast variety gas was used in their production, for in die casting gas is the only logical fuel.

Now for the bus wire that is nearly universally used for wiring radio receivers. This usually is a tin-coated copper wire that is either square or round in cross section. The tin coating is necessary in order to permit, or rather, facilitate soldering operations. Here again gas plays a very important part since big producers of tin products have, through experience, become strong advocates of gas as a fuel for tinning purposes.

The Tubes

Finally, we come to the heart of the radio receiver—the tubes. Tube manufacturers use gas as a fuel almost exclusively. There are several distinct processes of radio vacuum tube manufacture in which gas plays a most important role. The most important of these are stem-making, degassification of the tube



Gas Being Used In Tube Making Process

elements, annealing, sealing-in, pre-evacuation heating, and, last, but by no means least, high vacuum evacuation or exhaustion.

While gas is a very important factor in practically all radio manufacturing processes, it is particularly indispensable in radio vacuum tube manufacture. The visitor to a radio tube factory is usually amazed at the large array of gas devices that greet his glance, and each one of the numerous gas instruments and appliances plays a most important part in the manufacturing processes that are considered necessary if the finished product is to meet the demands of highly critical buyers and the competition of other manufacturers.

As The Journal Views It

SUPREME COURT WRITES FINIS TO DOLLAR GAS LAW

In 1923 the Legislature of the State of New York passed a law fixing the price of gas in New York City at a dollar per thousand. Early this week, after this law had been previously reviewed by referees and had passed through the lower Courts and in each case had been declared unconstitutional and confiscatory, the United States Supreme Court finally wrote finis to this act by holding that it was contrary to the Constitution in that the dollar rate amounted practically to confiscation. Thus, this case is ended exactly as those, who had a clear vision and understanding of the law, predicted at the outset.

The American Gas Journal, even before the law was passed, indicated in its columns that the passage and enactment of such a statute was foolhardy in the utmost degree. Those who formed the law understood well enough that it would not hold water when passed upon by the Courts. Their object was merely a political appeal and an attempt to gain popularity among the voters through the time-old practice of baiting the utility. The gas utilities of New York City have been fully substantiated in their stand that it was impossible for them to supply gas at such a figure and carry out their business properly and pay their regular dividends.

The unfortunate part of the whole affair is that legislators do not understand that in the long run the citizens pay for their mistakes, and in this case, there can be no other way in which the expenses of the long drawn-out litigation can be met except by taxing the pocketbooks of the citizens of New York City. It is hoped that this affair will carry a lesson to both the citizens and their legislators. The Courts will not permit them to legislate unfairly against the utilities, and there is no reason why such legislation should be even thought of, for the gas utilities and others in the City of New York are today giving the best possible service and deserve the support and commendation of all New Yorkers. It is hoped that the experience of the State of New York in this matter will deter others from passing similar unconstitutional acts and putting communities to large unnecessary expense in defending them through the Courts.

THE APPLIANCE TESTING LABORATORY

The Appliance Testing Laboratory of the A. G. A., located in Cleveland, Ohio, came in for a great deal of attention and discussion at the recent annual convention in Atlantic City. The work of the laboratory was explained in great detail by its director and by the chaiman of the committee that has this work in hand. Gas men heard discussions of the laboratory work not only by those who were directly concerned with it but by prominent men outside of the gas industry, particularly by the director of the Bureau of Standards in Washington.

Furthermore, an important set of resolutions was adopted at one of the general sessions relating to the work of the laboratory and stamping this work with the whole-hearted support and approval of the American Gas Association and the American Gas Industry. These resolutions were as follows:

"Whereas the association recognizes that our duty to the public we serve, as well as our own interest, demands undivided and wholehearted support of our Appliance Testing Laboratory and its program which has the full co-operation of the United States Bureaus of Standards and Mines and the Public Health Service, be it

"Resolved first, that it is the sense of the American Gas Association in convention assembled that no gas ranges or flexible gas tubing which do not bear the laboratory seal of approval will be sold or offered for sale by any member gas company;

"Resolved second, that since in the judgment of this association it is essential to make available to the American public at the earliest possible date a full quota of tested and approved appliances, every member gas company is requested to notify manufacturers of ranges and tubing of adherence to the policy stated in these resolutions;

"Resolved third, that it is detrimental to the best interests of the public and the gas industry that

appliances or tubing not qualifying for American Gas Association standards be made or marketed, and we deplore and disapprove any such practice; and

"Resolved fourth, that the executive board be requested to consider the adoption of a policy which will make the purpose of these resolutions effective both as to gas companies and manufacturers."

It is needless for us here to expound the advantages and to define the importance of such an institution as the Appliance Testing Laboratory. They are too well known to require repetition here. Furthermore, we believe that the gas industry as a whole is thoroughly sold on this work. It realizes that in putting itself under the control of such laboratory and binding itself to the sale and use of appliances of such high character as to be approved by the laboratory, it is merely fulfilling a duty that it owes the public, and in so doing there is no doubt that the gas industry itself gains much.

There is however one feature of the work of the Appliance Testing Laboratory that requires explanation. This work is slow and necessarily so from the great number of appliances that have been sent to the laboratory for testing. In the meantime, manufacturers of appliances that have not been decided will go on, as they have in the past, making apparatus of the highest quality in which every effort has been taken to procure the greatest safety and highest efficiency in the consumption of gaseous fuel.

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STABILIZATION OF MARKET PROGRESSES

(Continued from page 659)

accumulation of vast amounts of gold resulting from the war. The realization that, debt settlement or not, only little of the borrowed money will actually flow back to this country has helped much to abate the fear of possible financial indigestion, caused by the acquisition of too large an amount of cash for which there might not be any profitable use in our own market, requiring heavy exportations by one or the other means.

Prices Will Rise

Most market price experts have drawn from this the conclusion that prices will continue to decline. The writer is of the opposite opinion and thinks that a rebound will soon set in, raising upon a generally higher level the prices for almost all industrial commodities. This increase in cost, however, will not be a sensational upward movement like that witnessed during the war, but rather a reasoned attempt better to balance the rising cost of labor and the cost of selling. Labor no doubt has taken well care of its economic affairs, but the salaried man, the white collar worker and the large group of earners engaged in farming and artisan occupations, selling or manufacturing, but not belonging to the so-called wage earning classes, has found that the diminishing profit margin has also diminished their own earnings to a point where there is a danger of complete pauperization. This class of purchasers will have to be taken care of as they form an important part of the consumers of industrial merchandise, whose decline in purchasing power will attack the very foundation of the structure upon which the present day labor prosperity is built. This can be done effectively only by increasing the present margin of farming, artisan, or industrial occupations. The effect of such a policy upon the economic life of the country can be beneficial only. Not only will it put upon a sounder footing all farming and industrial enterprises, but it will strengthen the purchasing power of the salary and wage earning classes which has been seriously impaired in the course of the last few years.

Good Christmas Business Expected

Turning to the more immediate future of the market it does not seem difficult to predict a good Christmas business. All reports from retail centers agree on this one point that the volume of business has steadily increased during the present year with each month practically outmatching the corresponding month of the previous year. This is only natural because business has gone through a period of financial stress, and greater earnings with steadier employment are bound to bring renewed enjoyment in the ability of spending money. Furthermore many purchases, deferred last year under the stress of necessity, are now being made, helping to swell the total sales of department, chain, and other retail establishments.

Settlements Improving

Settlements, which had been somewhat slow during October and the beginning of November, have improved in the course of the month, and no difficulty is expected for the end of the year, especially as Christmas business is bound to leave a substantial cash balance in the hands of the retail merchants. Jobbers expect an expansion in the credit demand during the beginning of the year and base their prediction upon the increase in the volume of business which will be the result of the general improvement of the retail demand. Dealers will in this case be forced to arrange for larger stocks and will most likely not be able to pay for these at once. More credit, therefore, will be asked and will have to be given especially as other New Year payments will deplete the cash reserve. It is expected that the banks will be well able to take care of any emergency, should it arise.

No increase in wage demands is expected, and the end of the year seems to have brought also an end of most of the wage disputes which have troubled industry during the year 1926

The outlook is generally good.

INDUSTRIAL GAS LESSONS

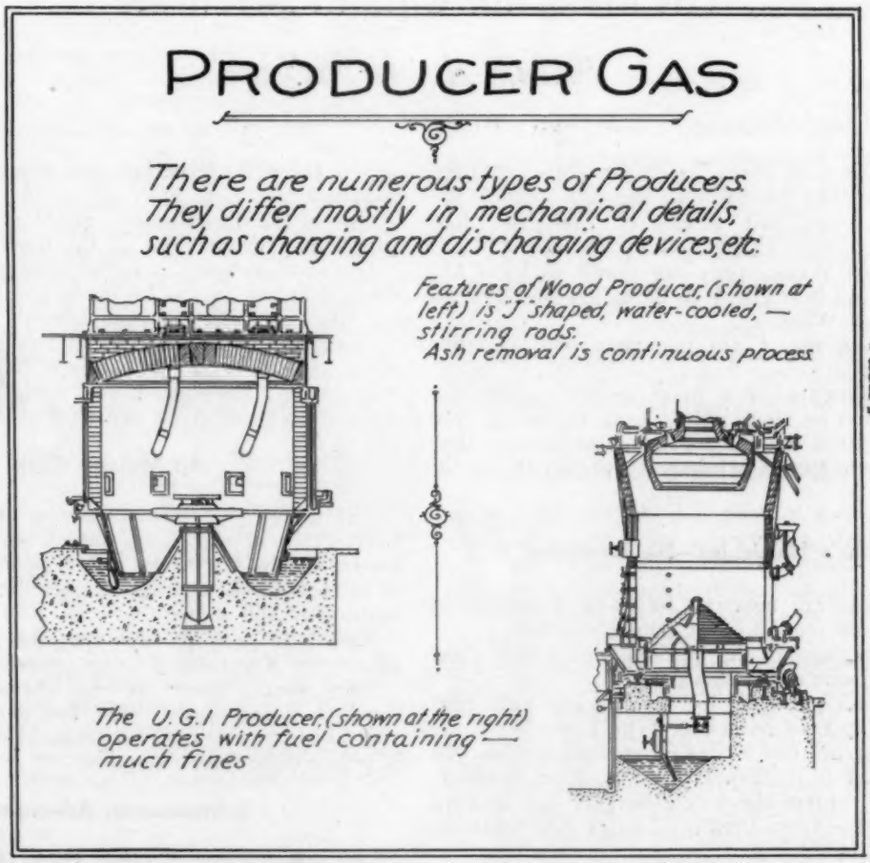
IF IT'S DONE WITH HEAT — YOU CAN DO IT BETTER WITH GAS

Lesson No. 146

Manufactured Gas

Composition of Producer Gas

The following tabulation gives the analysis of various producer gases. It will be seen from this table that the gas contains not only carbon monoxide and nitrogen but methane and hydrogen as well as some carbon dioxide. The carbon dioxide results from the complete combustion of a portion of the fuel. The hydrogen and the carbon monoxide represent the water gas constituent of the producer gas and the methane and other hydrocarbons that are shown in the table represent the coal-gas constituents.


PRODUCER GAS
There are numerous types of Producers. They differ mostly in mechanical details, such as charging and discharging devices, etc.
Features of Wood Producer, (shown at left) is J shaped, water-cooled, — stirring rods. Ash removal is continuous process
The U. G. I Producer, (shown at the right) operates with fuel containing — much fines

Use of Producer Gas

Producer gas has a certain definite use in industry. It is a cheap gas, cheaper than manufactured gas

when the producer plant is operated under favorable conditions. This means that producer gas may have an edge on manufactured gas in certain isolated cases where the consumption of gas is very large and regular throughout the year. But where the plant operates but for a short period of time, and where the consumption of gas is not particularly great, after all costs have been taken into careful consideration, it will be found that the manufactured gas is, in certain cases, the cheaper fuel.

However, it is unquestionably true that producer gas is a good industrial gas and a superior fuel to coal, for it is a fuel in the state in which combustibles actually burned in the furnace and the manufacture of producer gas from coal in a special device is a far more effective process than the conversion of coal into gas in the industrial furnace and its subsequent combustion. A particular advantage of producer gas is that it gives a high temperature.

Composition of Producer Gas

	CO	H_2	CH_4	CO_2	N_2
Dowson producer gas from coke	32.6	1.0		1.4	65.0
Metallurgical air gas	29.0	2.5		4.0	64.5
Dowson gas, average	25.0	18.0	3.0	7.0	47.0
Producer gas, little steam....	25.3	9.2	3.1	3.4	58.2
Producer gas, little steam....	22.74	8.37	2.56	5.3	60.13
Mond gas	11.5	28.5	2.1	15.	42.9

Trials of the Meter Reader

His life is not without adventure

Frank A. Woodhead

Manager, Arlington Gas Light Co.

"SOME time or other," said the Meter Reader, "when they have got all through naming the other days and weeks of the year, like 'Mother's Day,' and 'Father's Day,' and 'Be Kind to Dumb Animals Week,' they are going to have another week, and it is going to be called 'Be Kind to Meter Readers Week.'

"And, believe me, I am just groaning for that time to come."

The requirements of a good meter reader are many. He must be alert, polite, neat appearing, and he must be gifted with a degree of diplomacy that would do honor to the Minister to the Court of St. James.

Burglar's Hardships—No Rewards!

Courage and skill must he have, as flashlight in hand, he gropes around other people's cellars.

He must undergo all the hardships of a first class burglar, with none of the rewards.

No newspaper publicity for him, no one calls him by such distingushed names as "The Lone Wolf" or "The Gray Terror" nor writes movies about him. No one would think of it, except, perhaps, Mack Sennett.

Nor can he reform the way a burglar can, and go around on lecture tours thrilling Ladies' Aid Societies and Men's Clubs.

Fond of Dogs!

All meter readers are fond of dogs.

Also many dogs are fond of meter readers. Some prefer the calf of the leg, and others the seat of the trousers.

One of the first things a meter reader has to do is to get acquainted with all the dogs along his route.

If you ever heard a meter reader talk sweetly to some snarling cur, as he backs away carefully keeping his flashlight between himself and the animal, "Nice pretty little doggie, there's a dear old pup," while you know the things he is thinking about that dog couldn't be printed, you would understand how some folks grow to be deceitful.

An Amiable Chap

The meter reader is always an amiable chap who knows that in nine cases out of ten friendliness and kindness win, but there is a type of dog and a type of human whom a show of friendliness only renders suspicious and morose.

They are sure there must be something wrong about you if you want to be friendly.

They simply growl at you. As a last resort you can kick a dog of that sort, but with such a human you have to restrain your natural desire, and there is where diplomacy comes in.

Subterranean Adventures

One could write a whole book about the subterranean adventures of the meter reader.

He begins at the bottom, so to speak, like Horatio Alger's heroes used to.

And, talk about the University of Hard Knocks,

(Continued on page 666)

GAS MERCHANDISING

Domestic – Industrial

Ideas for the Man Who Sells

William H. Matlack

UP AND AT 'EM

NO doubt there is a man or men in your organization who are complaining about the amount of business they are securing, about the amount of their commissions. As a rule investigation will show that the main trouble is that the salesman does not come in contact with enough prospects to give him a larger pay check. He starts out in the morning with a live prospect or two, or maybe he will re-visit a prospect of yesterday, and, whether he sells or whether he doesn't, after the interview with prospect No. 1 he will jump into his rattler and ride clear across the city to visit prospect No. 2 and so on all through the six hours constituting his hard day.

That is the reason "we are going to have a long, hard winter." Now there is another type of salesmen who not only jump about on live prospects but who do a little "seed-sowing" in the way of making calls on folks who live next door to Mr. Live Prospect and who have a nose for gas appliances. In other words, there are a few salesmen in all organizations who work on the principle of the newsgatherer who knows that there is a story in every man if he can get it out of him. The gas appliance salesman knows there is additional need for gas in every home if he can only get the idea into the mind of the home manager. This man has little complaint about pay checks, business conditions or territory, for he is constantly meeting new prospects for the service and merchandise he sells.

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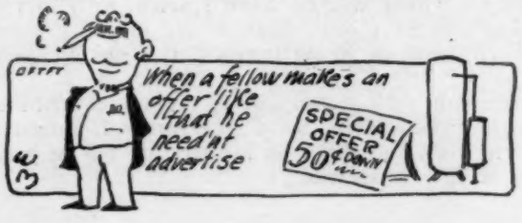
A WORD ABOUT ADVERTISEMENTS

WHY not fall in line with the times when designing your advertisements?

Why not make your theme one of today and design your lay-outs to secure quick attention of the woman, the home manager, who will either recommend the purchase, buy or supervise the use of the appliances you have for sale.

Make your appeal feminine in gender, and make it timely. Let your copy tell the woman what the use of modern gas appliances will mean to her in adding to personal appearances, health, happiness and "time off" from household duties and cares. Tell her their use means better complexions, less disarrangement of hair, softer skins, more freedom for the better things of life than "pot watching"; yet, at the same time, enable her to have more and better cooked foods.



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FIVE FUNDAMENTALS

IF you are planning some advertising, focus your mind on the five fundamental problems that must be solved before your message can be expected to produce sales interest: 1. Whom do you expect to sell the appliance to? 2. By what appeal do you expect to sell it? 3. How can you present your sales talk most effectively? 4. What medium shall you use to present your story? and 5. What can you afford to spend to get your message over to advertise the appliance? If you will consider these five factors before turning out advertising, your advertising will be more effective.

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NIGHT AND DAY ADVERTISING

WHEREVER it is possible and practical to use billboards for advertising gas, in our opinion it is more profitable to make your advertisement a day-and-night proposition than merely a day one. During the day folks are rushing here and there, in the majority of cases for business reasons, and naturally their minds are pretty much occupied with "the job"; they have very little time to read out-door advertising, even if they are so inclined. However, in justice to day-light boards, we must say that properly laid-out and shortly-worded day-light advertisements do go over, but not to the extent the night ones do. Take yourself as a fair example. Do you not read the advertisements that stand out in the night more frequently than those of the day? Check it up! If the blaze of light at night does not attract you oftener, we miss our guess. Below is an example of a good day-and-night out-door advertisement.

It is well laid out, contains a short, snappy message and even a fellow hitting the highway at 60

will get the message "Heat With Gas." You may well believe that that tells a big story, for it is a situation most everyone has to meet at some time or another and work out.

If this advertisement does nothing more than implant the idea of gas as a source of heat in the reader's mind it justifies its cost, for some day, some place, he will have a heating problem and he will recall "Heat With Gas."

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A SUCCESSFUL RANGE CAMPAIGN

(Continued from page 655)

successful because of the wholehearted co-operation of everyone connected with the organization. Thus, during the sale, everyone worked and this included division and district managers, salesmen, meter readers, bookkeepers, the women employees and even the colored employees. In this connection it must be mentioned that the help given by the women employed by the company was very material in making the campaign a success.

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TRIALS OF A METER READER

(Continued from page 664)

why there used to be a kind of architect whose chief joy was in designing cellar stairs and ceilings as a rough sort of practical joke on meter readers.

Any meter reader's head, after a day's work, would puzzle the most expert phrenologist, it has so many bumps.

Traps for the Meter Reader

Some householders, too, with a perverted sense of humor, it would appear, love to lay traps for the unwary meter reader. Almost always such people pile wood up around the gas meter, so the reader will do a few graceful falls getting to it.

A buck-saw, a few preserve jars and an ash barrel or two, artfully placed along the path of the meter reader, are pretty nearly sure to add a lot to the gaiety of his life.

One meter reader, a man past middle life and noted among the staff for his dignity and politeness, had a thrilling adventure some time ago, which he will long remember.

With a Splash!

Descending the unlighted cellar stairway of an Arlington dwelling, he placed his foot squarely in the middle of a squash pie set on the stairs to cool.

Naturally, the foot slipped out swiftly from under him and he sat down with a splash in the pie.

The housewife, attracted by the noise, put her head through the doorway and called inquiringly, "Hello?"

It is a very difficult thing, even with any amount of natural dignity and politeness, for a gentleman with a squash pie adhering to the seat of his trousers to greet a suddenly appearing lady with the proper degree of dignity and politeness, particularly if the pie is hot.

But this gentleman wheeled suddenly, removed his hat and bowed low with a honeyed, "Good morning, Madam, it's warm, isn't it?"

She thought he was talking about the weather, not the pie, and she might not have noticed that anything was amiss so great were his self-control and presence of mind, if the tin pie plate had not at that moment dropped with an awful clatter.

A Damaged Pie

Of course the lady had grounds for grievance, because her pie was considerably damaged, but so were the meter reader's dignity and trousers. It was, as you may say, fifty-fifty.

But all jesting aside, the meter reader, who conscientiously serves the public on his daily rounds, has many trials. He tries to do his best for you and for us, and we bespeak for him your kindly consideration.

It is not only for his sake that we ask you to keep the path to the gas meter clear, and not pile things around it.

Sometimes, in case of fire or accident, it is necessary for our men to reach the meter hurriedly to shut it off. It is conceivable that in certain cases human life might depend on ready access to it.

Also please see that vicious dogs are secured when the meter reader calls. Some of our meter readers have been bitten, one of them quite seriously, and I can assure you that there was nothing funny about it.

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BETTER COOKING IN THE HOME

THIS book is a compilation of menus prepared by the directors of Home Service Departments of leading gas companies.

It is gotten out under the auspices of Geo. D. Roper Corp., who wish to give proper recognition an dcredit to the women who have been pioneers in home service work for the gas companies in this country. These women have started with merely an idea and have built from it one of the greatest good-will building departments that a gas company can have.

The menu, with accompanying recipes, contributed by each of these Home Service Directors, is a masterpiece in itself and the book is therefore one of great value to any housewife.

PROGRESS IN GAS TECHNOLOGY
Domestic and Foreign

DETERMINING NAPHTHALENE IN ILLUMINATING GAS

BROW & BERGER have recently shown that a mixture of picrates of naphthalene and indene can be obtained by bubbling coal gas, made in horizontal or vertical retorts, through the solution of picric acid.

In order to obtain pure naphthalene picrate, Gair bubbled the gas through 33 per cent acetic acid and then through a solution of picric acid. Naphthalene picrate crystallizes out, but according to Walters, it is always contaminated with indene picrate. On the other hand, if a small amount of bromine is dissolved in acetic acid before the latter is added to the picric acid, an additional compound with indene is formed, that is, the di-bromide, which does not precipitate in the picric acid solution. Naphthalene picrate crystallizes alone. It is filtered, washed and titrated as usual with soda solution. Tests have been made with the method on an artificial method of naphthalene and indene dissolved in acetic acid, and the results have been very satisfactory.

For further details readers are referred to the Journal of the Institute of Chemical Industry, Vol. 45, pages 205 to 206-T.

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SAFETY RULES FOR USE OF GAS IN HOMES

THE Information Circular No. 600 issued by the Bureau of Mines, Department of Commerce, Washington, D. C., is concerned with safety rules applying to the use of various hazardous gases in the home and in industry. One section of this bulletin is devoted to natural gas and to manufactured gas and contains interesting information regarding safety methods and ways in which accidents may be avoided in the use of these gases.

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COKING QUALITY OF COAL

MIX the pulverized coal with fine sand in various proportions and then determine the capability of the structure to remain intact in a mass on being allowed to fall. This method, however, was found to give incompletely satisfactory results. Furthermore, the time spent in making the test is too great. Accordingly, other tests were made. Pulverized coal was mixed with a constant quantity, namely 17 parts of fine sand, and the mixture was coked in a porcelain crucible, heated in a muffle-furnace to a temperature of 800° to 900° C. Then the weight of the remaining coked mass was determined. This mass was then tested in a specially constructed apparatus and the comparative size of the particles of the coked product was determined with the aid of the Breslan Rotary Screen. This method was found to give pretty fair concordant results, after certain slight changes had been made. One of the principal conditions that must be fulfilled in using this method is to see that the coal sample is still in the fresh, pulverized condition, for when the sample is allowed to lay in the air for any length of time, and even when it has been dried at a temperature of 125° C. and then kept in a flask closed with a stopper, a certain deviation will be found in the analytical results.

For further details see Het Gas, Vol. 46, pages 243 to 248.

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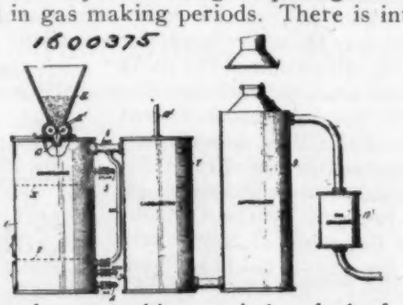
ENRICHED WATER GAS

ENRICHED water gas is made by a process which consists in alternately passing streams of air and steam through a bed of ignited carbonaceous fuel in a generator during a plurality of successive blow and gas making periods. The steam is decomposed during its passage through the fuel bed in gas making periods. There is introduced



during each gas making period a fuel of a plastic consistency and in a ribbon-like form and containing oil, comminuted coal and water, the volatiles of which are vaporized and mixed with the water gas, while the residue collects on the bed of fuel and in the generator as carbon before a succeeding blow period. (United States Patent No. 1,600,375.)

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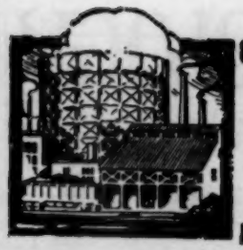
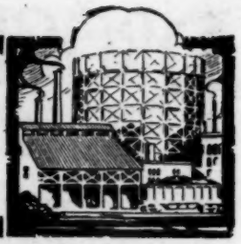
THERMAL VALUE OF GAS FROM VERTICAL RETORTS

A NUMBER of large scale experiments were made for the purpose of obtaining comparative results on the operation of the ordinary inclined retort and the continuous operating vertical retort. These were carried out at the South Metropolitan Gas Company in London. It was the purpose of these experiments to determine whether or not it was possible to produce gas and coke of the same properties as of the gas and coke produced in the intermittently operating inclined retorts in the aforementioned continuously operating vertical retorts. It was found that, after certain simple changes in the construction of the vertical retorts had been made, it was possible to increase the thermal value of the gas manufactured in the vertical retort installation.

For further particulars the readers are referred to the Gas Journal, Vol. 175, page 256.



NEWS OF THE GAS INDUSTRY



Dollar Gas Voided as Confiscatory by Supreme Court

Federal Tribunal Holds Law Fixing That Rate for New York City Is Invalid

Washington, D. C.—The New York law of 1923, fixing a rate of a dollar a thousand on gas furnished in New York City, has been knocked out by the United States Supreme Court on the ground that it was confiscatory.

The high court ruled that the dollar rate amounted to confiscation, as adjudged by the lower courts, and was therefore void, but directed a modification of the parts of the decrees which held the statute invalid "for any reason except conflict with the 14th Amendment because confiscatory in effect."

Three cases were disposed of. One was brought by the Consolidated Gas Company of New York, a second by the Brooklyn Union Gas Company, the third by the Kings County Lighting Company. The Consolidated case was treated in one opinion and the two others in a second opinion.

Would Not Yield 6 Per Cent

In the case of the Consolidated the Court emphasized a statement made by the Master who handled it for the Federal Court for the Southern District of New York that the dollar rate would not yield 6 per cent on the company's investment. In the case of the Brooklyn Union Gas Company and the Kings County Lighting Company, the Court stressed the assertion of the Master who acted for the Federal Court for the Eastern District of New York, that the rate prescribed would not yield 5 per cent on their investments.

The three cases came to the Supreme Court on appeal of the Attorney General of New York from judgments in the two Federal District Courts in New York, in which the State Law was ruled to be void, not only on the ground that it was confiscatory, but also for other reasons. It was noted in Justice McReynolds' opinion which was read by Chief Justice Taft in the absence of Justice McReynolds, that the New York Public Service Commission did not join in the appeal.

"The commission wisely, we think, declined to ask a review here of the final decree," commented Justice McReynolds.

Requirements for Water Heaters and House Heating Appliances Formulated

New York City.—The special committees preparing approval requirements for water heaters and central house heating appliances have tentatively completed their new standards, which have been sent out for criticism and suggestion to the gas companies. Gas men have been asked to study these specifications from every angle and with the greatest care, and comments are requested to be sent in to the association headquarters not later than one month from date on water heater requirements and two months from date on central house heating requirements.

Columbia Gas & Electric Consolidation Largest of Kind

Corporation to Issue $95,000,000 in Preferred Stock

In its first letter to shareholders of the new Columbia Gas & Electric Corporation, organized to give effect to the merger of Columbia Gas & Electric Company and Ohio Fuel Corporation, the company recently reported gross earnings of the new Columbia System for the twelve months, ended September 30, 1926, of $91,464,131, while for the first nine months of 1926 these earnings were $66,858,209.

The size and strength of the consolidated property is otherwise revealed for the first time in the balance sheet which shows total assets in excess of $483,000,000; current and working assets of over $37,750,000 as compared with less than $20,000,000 of current and accrued liabilities; funded debt of $58,080,000; stock capitalization of approximately $213,000,000; reserves of more than $120,000,000; surplus of $69,000,000.

Largest Transaction of Its Kind

So far as the merger of the two companies is concerned, the figures show it to be the largest transaction of the kind in the history of the industry. Incidental to this amalgamation, it is stated that all the assets and business of Ohio Fuel Corporation have been acquired, practically ninety-eight per cent of the Ohio Fuel stock having been deposited with the committee, while more than ninety-three per cent of the common stock and over seventy-seven per cent of the preferred stock of Columbia Gas & Electric Company was acquired by the new corporation.

Announcement is made that there will be presently issued (including shares issuable in completion of the exchange for shares of Ohio Fuel Corporation capital stock) $88,882,700 par value of

cumulative six per cent preferred stock and 2,901,624 shares of common stock without par value of Columbia Gas & Electric Corporation. To the extent that additional shares of preferred and common stocks of Columbia Gas and Electric Company are deposited under the plan of union or merger within a reasonable period and are accepted by the corporation, it will issue additional shares of its own stocks in exchange therefor on the basis originally offered, which will then make a total of $95,184,800 preferred and 3,000,000 shares of common outstanding.

New Board of Directors

The makeup of the board of directors and official staff of the new corporation is announced as follows: Directors—Clarence M. Brown, Murray H. Coggeshall, Fred W. Crawford, George W. Crawford, Harry J. Crawford, Leslie B. Denning, Marshall Field, Philip G. Gossler, Thomas B. Gregory, Joseph W. Harriman, James M. Hutton, John G. Pew, William P. Philips, Samuel Y. Ramage and Harold Stanley. The officers are: George W. Crawford, chairman of the board; Philip G. Gossler, president; Fred W. Crawford, Leslie B. Denning, W. Winans Freeman, Thomas B. Gregory and John G. Pew, vice-presidents; Edward Reynolds, Jr., secretary and treasurer; David E. Mitchell, assistant secretary; George W. Ratcliffe, assistant treasurer, and Ralph G. Irvine, auditor.

* * *

J. A. Wilhelm Resigns From Gas Co.

Lebanon, Pa.—J. Anson Wilhelm, who has been indentified with the Lebanon Valley Gas Company in a clerical and official capacity for upward of 13 years, has tendered his resignation to the company as secretary and treasurer, which position he now occupies.

Coincident with the above comes the announcement that Mrs. Rose M. Clark, who succeeded to her father's extensive insurance business some years ago, and who has been operating under the name of J. Henry Miller Company, has transferred her interests in their entirety to the J. Henry Miller Company, Inc., in which corporation she will continue to serve. Her associates in the new corporation, a charter for which is now pending before the State Department, will be Paul L. Strickler, who has been connected with the office for several years, and J. Anson Wilhelm. The organization of the company will be effected as soon as the charter is granted.

* * *

G. B. Willard New Treasurer For Greenwich Gas Co.

Greenwich, Conn.—Announcement is made by E. F. Putnam, president of the Greenwich Water and Gas Company, of the appointment of George B. Willard as treasurer of the Greenwich Water and Gas Company and subsidiaries.

Mr. Willard will very shortly assume his new position, as soon as he has been relieved of his present duties as deputy state treasurer and receiver-general of the State of Massachusetts, which position he has held since 1916. Mr. Willard as deputy state treasurer and receiver-general of Massachusetts, has had charge of the receipt and disbursement of all of the Massachusetts state funds, as well as the investment of them in various ways. Prior to entering the service of the state, he was auditor, tax collector and treasurer of the city of Waltham. He is also treasurer of the Middlesex County Extension Service and treasurer of the Waltham Country Club, as well as being president of the Commonwealth Service Association, an organization of all state employees in Massachusetts. Mr. Willard plans to move his family here later in the winter.

Laboratory Must Approve Ranges

Michigan Gas Association Pledges Support to National Movement

Ann Arbor, Mich.—Michigan gas companies have joined in the movement to stop the sale of all gas ranges and flexible tubing that do not bear the approval seal of the American Gas Association's testing laboratory at Cleveland, O., Charles R. Henderson, Ann Arbor, president of the Michigan Gas Association, has announced.

Action of the gas industry in banning sale of ranges not approved by the laboratory ranks among the outstanding accomplishments of the gas industry and will elevate the industry to the plane of greater usefulness, according to Mr. Henderson.

"The executives of the gas business have pledged the support of their respective companies in combating inferior and unapproved appliances," he said. "It soon will be impossible to find a market for the appliance that does not bear the laboratory's seal. The public is beginning to realize that the laboratory stands for the most convenient, economical and safe utilization of gas."

The laboratory, which has been in existence less than two years, now has tested and approved 1,373 gas ranges, 14 types of flexible gas tubing and 14 space heaters. Many of the approved products are manufactured in Michigan.

* * *

Ohio Gas to Increase Capital Stock

Bryan, O.—Capital stock of the Ohio Gas, Light & Coke Co. will be increased from $500,000 to $1,000,000 to carry out an expansion program started some time ago. The work is to be financed by a bond issue.

The company has been authorized by stockholders to purchase the Killbuck & Millersburg Gas Co., near Mansfield, and some properties of the East Ohio Gas Co., Cleveland. In all this purchase will add seven towns with a population of about 15,000 to the business.

* * *

R. S. Wood Convalescing From Illness

New York City—Friends of Mr. Richard S. Wood, president of the Stevenson Distributing Corporation, owner of Shoot-a-lite, will be glad to know that he is convalescing in the New York Hospital, after a recent operation.

New Law on Service Interruptions

All Companies Required to Report to Commission

Albany, N. Y.—The Public Service Commission has issued an order effective December 10, requiring all gas, electrical and steam corporations to report interruptions to its service having a duration of five minutes or more, which may occur upon its transmission and distribution mains and lines.

The order issued requires weekly reports by Wednesday of each week "of each interruption of service from any cause whatsoever, having a duration of five minutes or more, which may occur upon the transmission and distribution mains and lines of such corporations." Reports in the counties of New York, Bronx, Westchester, Richmond, Queens, Nassau and Suffolk will be made to the New York office of the commission and in all other counties to the Albany office.

Immediate notice by telephone or telegraph is required of all interruptions to service having a duration of fifteen minutes or more, stating the location and nature of same, and the cause, if known.

New Machinery for Colon Gas Works Being Installed

Manufacturing Equipment Doubled

Cristobal, C. Z.—The Colon plant of the Panama-Colon Gas Company, has recently been the scene of considerable activity in connection with the installation of the new Jones oil gas machine, as the company's increased business on the Atlantic side has made it necessary to increase the generating capacity of the plant. The new machine being installed is similar in design to the machines being used at present, except that it is much larger, and has double the capacity of the machines in use at present, the new set having a rated capacity of 500,000 cubic feet of gas per day.

R. G. Light, superintendent of manufacture at the Colon plant, is in charge of this construction work. Before coming to the Isthmus he was superintendent of the Monterey, California, gas plant, and has had considerable experience with work of this kind.

With the installation of the new machine, Colon will have a gas plant which will be equal in equipment to any plant of its size in the United States, and reflects great credit on the foresight of Paul Vecker, general manager of both the Colon and Panama plants.

Mr. and Mrs. J. J. Toomey Leave for World Trip

Mr. and Mrs. J. J. Toomey of Chicago, sailed from New York, December 2, on the Canadian Steamship Empress of Scotland, for a trip around the world.

Several farewell parties were given in honor of Mr. and Mrs. Toomey immediately preceding their departure. The first one was a dinner given at the Morrison Hotel, November 18th, by a combined assemblage of the stove agents and salesmen, located in Chicago and representing many different factories. Mr. Toomey was presented with a very fine travelling bag.

On Monday night, November 23rd, a dinner was given at the City Club, Chicago, and was attended by thirty of the officers and employees of the Acorn and Vulcan Divisions of the Standard Gas Equipment Corporation. Many of those attending this dinner have been associated with Mr. Toomey from ten to twenty-five years; while the toastmaster, F. J. O'Neill, has been associated with Mr. Toomey for over forty-six years.

Mr. Toomey was originally with the Rathbone-Sard & Company at Albany, New York, in 1881, where he served them faithfully. When they migrated and built the plant in Aurora, he went out in 1892 to help them in what is now the Acorn Division of the Standard Gas Equipment Corporation. In his absence, the Chicago Acorn business will be cared for by his son, Will Toomey.

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W. H. McKenzie Celebrates Golden Jubilee of Gas Service

—Kansas City, Mo.—"Fifty Years in the Gas Business." That is the entry William H. McKenzie, general manager of the Wyandotte County Gas Company, might make in his diary today—if he kept a diary.

November 15, 1876, McKenzie started in the gas business as a laborer for a gas manufacturing company in Xenia, O. His first job was shoveling coal into a retort for the making of coal gas.

In 1885, McKenzie came to Kansas City to accept a position with the Wyandotte Gas Company. At that time the entire plant of the Wyandotte Company was housed in a brick building 25 feet by 40 feet and its total number of customers was less than 350.

McKenzie's job was that of street foreman and as the plant was small the street foreman had a variety of duties which included supervision of all ditch digging for mains and extensions, the making of service connections and the installation of meters. In addition to the street work, McKenzie did considerable work in the plant.

In 1896 McKenzie was transferred to Sioux Falls, S. D., as superintendent of the company's plant at that place. He remained there until 1905 when he was transferred to Kansas City as general manager. That was the year the Kansas City plant "turned" natural gas into Kansas City. The company then had 9,000 customers. About this time the company name became Wyandotte County Gas Company.

During the twenty-one years McKenzie has been general manager the company's customers have increased from 9,000 to 23,000. McKenzie was one of the founders of the Natural Gas Association, a national association of owners, officers and managers of gas manufacturing and distributing plants.

Today McKenzie's friends have made a golden jubilee celebration of McKenzie's entrance into the gas business and his desk has been showered with congratulatory letters, post cards and telegrams from Kansas City friends and from representatives of gas companies throughout the United States.

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Charles E. Thomas Dies

Charles Edward Livingston Thomas, vice-president of the Bronx Gas and Electric Company, died at one o'clock Tuesday morning, November 30, after an illness of three days, at his residence, Alger Court, North Gate, Bronxville, N. Y. Mr. Thomas was taken with a heavy cold which developed into grippe. His death was unexpected. Mr. Thomas was born in Belleville, Ill., on April 11, 1876. He early developed the traits of a student and graduated from Yale University in the class of 1897. It was during those university days that Mr. Thomas became a very warm personal friend of Nicholas F. Brady, who was then in Yale.

In 1898 Mr. Thomas volunteered and entered the American army in the Spanish-American War. In Cuba he became aide-de-camp to General Fitz Hugh Lee. At the conclusion of hostilities, Mr. Thomas and two companions were selected to go to the roof of Morro Castle where the Spanish flag was lowered, and Mr. Thomas and his companions for the first time raised the American flag over the isle of Cuba. This incident was one that Mr. Thomas related only occasionally to his friends, but with excusable pride, because he had taken this part in banishing for all time the Spanish flag from American waters.

For about ten years Mr. Thomas represented Nicholas F. Brady and the Brady family in the management of their large gas interests, the Osaka Gas Company, Ltd., in Osaka, Japan. When Mr. Brady sold the Osaka properties, about two years ago, Mr. Thomas returned to this country and was associated with Messrs. Nicholas F. Brady and James C. Brady in their office at No. 80 Broadway. He remained there until November 15, 1925, when he came to the Consolidated Gas Company of New York, as assistant executive associated with Walter R. Addicks, senior vice-president of that company. Mr. Thomas was elected vice-president of the Bronx Gas and Electric Company, a subsidiary of the Consolidated Gas Company, on April 20, 1926. In this latter organization Mr. Thomas became a very ardent co-worker with his associate, Eugene H. Rosenquest, president of the Bronx Gas and Electric Company, who was proud of the growth of that company in the past, and looked forward to larger development of the gas and electric business in that section of the Bronx.

Mr. Thomas was a prolific reader and a poet of unusual merit. In Edmund Clarence Stedman's "An American Anthology," in that section devoted to the collection of college verse worthy of note, is printed Mr. Thomas' poem "To a Moth."

Mr. Thomas' body was taken to St. Louis, Mo., in a special car on the afternoon of December 1. Mr. Thomas left a wife and a daughter, eighteen years old. Among other clubs of which Mr. Thomas was a member was the Yale Club, the American Yacht Club, the Spanish-American War Veterans' Association, the Bronxville Field Club, American Gas Association, and college fraternities.

A New Tenney Service Company

Boston, Mass.—On Thursday, November 18th, 1926, the Salem Gas Light Company of Salem, Mass., became a part of Tenney Service. On that day the following officers and directors were elected: president, D. E. Manson; vice-president, A. B. Tenney, clerk, Mrs. Hagar; treasurer, John L. Tudbury.

The board of directors consists of Charles H. Tenney, D. E. Manson, A. B. Tenney, E. M. Bradley, Palmer York, A. W. Rogers and D. Willard Leavitt. John L. Tudbury was appointed manager of the company.

Commenting upon the purchase of the Salem Gas Light Company by the Tenney Service organization the Salem Evening News said:

"The Tenney Service is very well known to Salemites, as Charles H. Tenney & Company have acted as managers of the Salem Electric Lighting Company for the past seventeen years, during which time the company, under the management of S. Fred Smith has enjoyed most friendly relations with the people and industries of the city.

"It was only a short time back that announcement of a voluntary reduction to all classes of its consumers was announced made by the company to take effect the first of the new year, with another reduction coming next summer. It is possible that with Tenney Service taking over the Gas Light Company similar benefits may accrue to its Salem and Peabody consumers some time in the future.

"The Salem Gas Light Company was organized April 4, 1850, its office and works being first located on Northey street. The plant was transferred in 1890 to the Pierce & Waite lot on Bridge street, better known as the "old circus grounds," where it is at present. The office has been at various locations, being moved from Northey street to Essex street in a building which stood on the site of the Almy, Bigelow & Washburn store, later to one of the stores formerly in the front of the present Peabody Museum building nearly opposite St. Peter street, its fourth home was in the Kinsman block on Washington street, from whence, in 1922, it moved to its present handsome office building on Essex street, the structure being especially built for the purpose on the site of the old Choate estate. Every move of the company has been one of progress during its entire career. Col. Henry A. Hale has been the president since 1891, or a period of 35 years and John L. Tudbury is the manager.

"In a statement to a representative of The News, Colonel Hale stated that, in the opinion of himself and the other directors, the transfer of the management of the affairs of the Gas Light Company to a concern of the high standing of Charles H. Tenney & Company should prove of benefit to the public as well as the company, insuring to the former the same grade of efficient service and giving the company the benefit of the large purchasing power and efficient methods for which Tenney Service is well known in Salem."

Adamant Cement Exhibit At Power Show

At the Fifth National Exposition of Power and Mechanical Engineering, in Grand Central Palace, New York City, from December 6th to 11th, booth No. 546, we will exhibit our product, Adamant Fire Brick Cement, including a number of unusual forms of fire brick construction possible with Adamant, providing longer boiler setting life and lower costs. In addition, we will exhibit a new development that greatly facilitates maintenance of brickwork in boiler furnaces.

In attendance will be Mr. L. B. Botfield, Mr. Axel H. Engstrom, sales manager; Mr. Chas. C. Phillips, New York district manager; Mr. W. B. Smith, refractories engineer; Mr. A. J. Wittwer and Mr. Joseph J. Sweeney.

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GAS HEATING With Peerless Super Section Boilers

Under this title, the Peerless Heater Company, of Pittsburgh, Pa., have issued an unique, well-written, brochure of 24 pages, of a size that can be conveniently slipped into the coat pocket for leisurely perusal.

The compiler of this brochure has gone into great detail in advancing arguments supplemented by facts and figures, why Peerless Super Section Boilers should be specified.

Illustrations of the two types,—3-inch and 5-inch—Junior Peerless Super Section Boilers are shown as well as detail views. A test chart and sectional drawing of a complete installation, with interesting marginal sketches help to center interest on the value of the Peerless as a gas heating medium.

The Peerless Heater Company will gladly send you a copy on receipt of your request.

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Consolidated Gas of Baltimore Considers New Financing

New York City—A special meeting of the board of directors of Consolidated Gas, Electric Light and Power Company of Baltimore will be held to consider a plan for new financing.

While officials of the company decline to discuss details it is understood the plan will provide for issuance of approximately $2,000,000 of 6 per cent preferred stock, 84,154 shares of additional no-par value common stock and $7,000,000 of 5 per cent bonds.

The preferred stock will be offered to customers of the company while the present stockholders will be given rights to subscribe to the common stock.

Bonds probably will be offered by Alexander Brown & Sons, Brown Bros. & Co., Lee Higginson & Co., Jackson & Curtiss and Spencer Trask & Co.

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G. S. Hawley Heads Connecticut Gas Men

Bridgeport, Conn.—The Connecticut Gas Association, which comprises all of the gas companies in Connecticut, at their annual meeting recently at the Graduate's Club in New Haven, elected George S. Hawley, vice-president of the Bridgeport Gas Light Co., president of the state association.

Mr. Hawley succeeded W. H. Nettleton, former president of the New Haven Gas Light Co., who died about a year ago and who for a number of years was president of the state association. The vice-president elected is Andrew J. Sloper, president of the New Britain Gas Light Co.

Charles A. Leonard, general manager of the Meriden Gas Light Co., was elected treasurer.

E. E. Eysenback, who is the vice-president and general manager of the Hartford Gas Light Co., was chosen secretary. The assistant secretary is J. A. Norcross, vice-president and general manager of the New Haven Gas Light Co.

Central Hudson Merger Before Public Service Commission

Albany, N. Y.—Petition has been made to the Public Service Commission for authority to consolidate the Central Hudson Gas & Electric Company of Poughkeepsie, the Dutchess Light, Heat and Power Co., of Rhinebeck, the United Hudson Electric Corporation of Poughkeepsie, the Kingston, N. Y. Gas and Electric Company, the Ulster Electric Light & Power Co of Saugerties, and the Upper Hudson Electric & Railroad Co. of Catskill into a new corporation, to be called the Central Hudson Gas & Electric Corporation.

The six companies which are to be consolidated into the new company, as proposed in the petition, supply gas and electricity for light, heat and power in various cities, villages and towns in Orange, Ulster, Dutchess, Columbia, Greene and Albany counties. There will be a public hearing on the petition at the New York office of the commission, 120 Broadway, on December 3.

The petition states: "The proposed consolidation will result in the elimination of numerous unnecessary corporate entities, requiring as they do, separate boards of directors and officers, the holding of separate corporate meetings, separate corporate records and books of account and separate financing. As a result of the consolidation the operation of these properties as one unit will be more efficient and will result in many economies and will greatly facilitate their arrangement and financing. Your petitioners believe that the securities of the new corporation can be sold more easily and the financing of additions and betterments made at a considerable reduction in cost. Your petitioners believe that the consolidation will be in furtherance of the public service."

The Central Hudson Gas & Electric Corporation also asks approval of a new first and refunding mortgage on all its properties and to issue bonds thereunder and also to issue common and preferred stock to be exchanged for the common and preferred stock of some of the companies. The new company also asks approval of the transfer of the franchise works and systems of the six companies to it and for the right to operate in the territory now covered by them.